

South Carolina Office of Regulatory Staff's

Review of South Carolina Electric & Gas Company's

2018 Annual Update on

Demand Side Management Programs and

Petition to Update Rate Rider

Docket No. 2018-42-E

EXECUTIVE SUMMARY

On January 30, 2018, South Carolina Electric & Gas Company ("SCE&G" or the "Company") filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider. The Company is requesting to recover \$32,993,539 in this filing.

SCE&G's amortized program costs, with carrying costs, constitutes \$13,278,690, or 40% of the total requested amount, Net Lost Revenues ("NLR") is \$17,919,053, or 54% of the total requested amount, and \$1,795,796, or 6% of the total requested amount, is the amortized portion of the Company's Shared Savings Incentive ("SSI").

ORS is encouraged by the recent increased participation in the Company's programs along with the decreases in three of the four rate riders, and finds the updated DSM Rate Rider to be developed in accordance with the terms and conditions set forth in Commission Order Nos. 2010-472 and 2013-826.

The following table compares the previous DSM Rate Riders to those currently requested by SCE&G:

DSM Rider Class	Approved 2017 Rate (¢/kWh)	Requested 2018 Rate (¢/kWh)
Residential	0.276	0.221
Small General Service	0.202	0.259
Medium General Service	0.197	0.182
Large General Service	0.149	0.095

The Company's requested rate change would decrease the bill of an average residential customer using 1,000 kWh per month by approximately \$0.55.



INTRODUCTION

South Carolina Electric & Gas Company filed a Request for Approval of its Demand Side Management (“DSM”)¹ Plan Including a DSM Rate Rider and Portfolio of Energy Efficiency Programs with the Public Service Commission of South Carolina (“Commission”) in Docket No. 2009-261-E on June 30, 2009. Nine (9) DSM programs were proposed by the Company – seven (7) targeting residential customers and two (2) for commercial and industrial customers. Two (2) settlement agreements – the General Settlement Agreement and the Opt-Out Settlement Agreement – were approved by the Commission in Order No. 2010-472 dated July 15, 2010.

On May 31, 2013, the Company filed an Application for Approval to Continue Demand Side Management Programs (Docket No. 2013-208-E) with no change to the DSM Rate Rider and with a revised portfolio of DSM programs. A Settlement Agreement was reached by the Company, the South Carolina Office of Regulatory Staff (“ORS”), the South Carolina Energy Users Committee and Wal-Mart Stores, East and Sam’s East, Inc. On November 26, 2013, the Commission approved the Settlement Agreement and ordered the following:

- the Company’s revised portfolio of DSM programs should be approved as filed;
- the Company should retain the authority and flexibility to modify, amend, terminate and/or add any measure or program without seeking prior Commission approval;
- the Company should continue to file annual reviews of the programs and program costs with the Commission and the ORS;
- the Company should review additional programs designed specifically for low-income participants;
- the Net Lost Revenue (“NLR”) recovery should be limited to a rolling three (3) year period; and
- the amortization period for the recovery of Program Costs and Shared Savings Incentive (“SSI”) should be five (5) years.

The Settlement Agreement also provided the option for certain non-residential customers having annual energy consumption of 1,000,000 kilowatt hours (“kWh”) or more to opt-out of the DSM programs and required that non-residential customers who accepted a DSM rebate from the Company remain in the programs for five (5) years from the date of acceptance. Finally, the Settlement Agreement provided that any party could request a review and submit proposed changes to both the mechanism and the portfolio of programs

¹ SCE&G refers to the programs as DSM programs, and ORS does the same, even though the programs are better described as energy efficiency programs.



after six (6) years. The Settlement Agreement was approved by the Commission in Order No. 2013-826.

On January 31, 2014, the Company filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider with the Commission in Docket No. 2014-44-E. After reviewing the Company's filing in this case, ORS made several recommendations that were subsequently approved by the Commission in Order No. 2014-381. Those recommendations are as follows:

- the elimination of the Residential Energy Information Display Program and Home Performance with ENERGY STAR Program due to the programs' lack of cost-effectiveness;
- the reduction in the recovery of projected NLR by 25% to mitigate costs to ratepayers stemming from participation estimates; and
- the modifications to the Residential ENERGY STAR Lighting Program to ensure that incentives are available to SCE&G customers only, and to reflect changes occurring due to federal standards that are removing certain bulbs from the marketplace.

On January 30, 2015, the Company filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider with the Commission in Docket No. 2015-45-E. Concerning this case, ORS made the following recommendations that were subsequently approved by the Commission in Order No. 2015-307:

- the limitation of collection of NLR for the Home Energy Report Program to the time the customer is enrolled in the program;
- the elimination of the rebate offered for air conditioners with an energy efficiency rating of 14 SEER or below under the Heating & Cooling and Water Heating Equipment Program;
- encouragement for the Company to explore cost-effective methods to increase its energy efficiency efforts and to use the Advisory Group as a resource for program growth and design and to reduce administrative costs associated with the DSM programs; and
- an investigation by the Company to address the causes of the large number of opt-outs from the DSM programs by large commercial and industrial customers.

On January 29, 2016, the Company filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider with the Commission in Docket No. 2016-40-E. ORS recommended that the Company update the avoided costs used to compute the benefits

and overall cost effectiveness of the programs. ORS and the Company will continue to monitor cost effectiveness of programs to determine if future modifications are necessary.

On January 31, 2017, the Company filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider with the Commission in Docket No. 2017-35-E. ORS recommended that the Commission approve the updated Rate Rider as requested.

On January 30, 2018, the Company filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider with the Commission in Docket No. 2018-42-E. The Company is requesting the updated DSM Rate Rider be effective for the twelve (12)-month period beginning with bills rendered on and after the first billing cycle for May 2018 and ending with the last billing cycle for April 2019 ("Recovery Period"). ORS, in accordance with the terms of the approved Settlement Agreements, conducted a review of SCE&G's Filing. ORS's review includes an evaluation of the three (3) major cost components associated with the Company's DSM programs—Program Costs, NLR, and SSI.

The following table illustrates the Program Years since the inception of the programs:

Program Year	Beginning Date	Ending Date	
1	October 1, 2010	November 30, 2011	
2	December 1, 2011	November 30, 2012	
3	December 1, 2012	November 30, 2013	
4	December 1, 2013	November 30, 2014	
5	December 1, 2014	November 30, 2015	
6	December 1, 2015	November 30, 2016	
7	December 1, 2016	November 30, 2017	"Review Period"
8	December 1, 2017	November 30, 2018	"Forecast Period"

The Company's actual costs were audited for the period December 1, 2016 through November 30, 2017 ("Review Period" or "Program Year 7"). ORS also reviewed the Company's cost projections for the period December 1, 2017 through November 30, 2018 ("Forecast Period" or "Program Year 7").



DSM PROGRAMS

The Company currently offers eight (8) DSM programs. The programs and the launch dates of each program are as follows:

<u>Residential Programs</u>		
i.	Home Energy Check-Up	10/01/2010
ii.	ENERGY STAR Lighting	02/14/2011
iii.	Heating & Cooling	03/01/2011
iv.	Home Energy Reports	04/06/2011
v.	Neighborhood Energy Efficiency Program (NEEP)	07/30/2013
vi.	Appliance Recycling	10/30/2014
<u>Commercial and Industrial Programs</u>		
vii.	EnergyWise for Your Business	10/01/2010
viii.	Small Business Energy Solutions	11/24/2014

During Program Year 7, all but one of the Company's DSM programs experienced increased participation, resulting in significantly increased energy savings. Highlights follow.

- The residential ENERGY STAR Lighting Program online store experienced significant success, and the Company is now also distributing LED kits at SCE&G business offices in Columbia, Aiken, Charleston, Summerville and Beaufort.
- The Appliance Recycling program saw a near tripling of participation in Program Year 7 as compared to Program Year 6. ARCA Recycling is implementing the program on behalf of SCE&G.
- Participation in the Company's low-income Neighborhood Energy Efficiency Program nearly doubled in Program Year 7 as compared to Program Year 6.

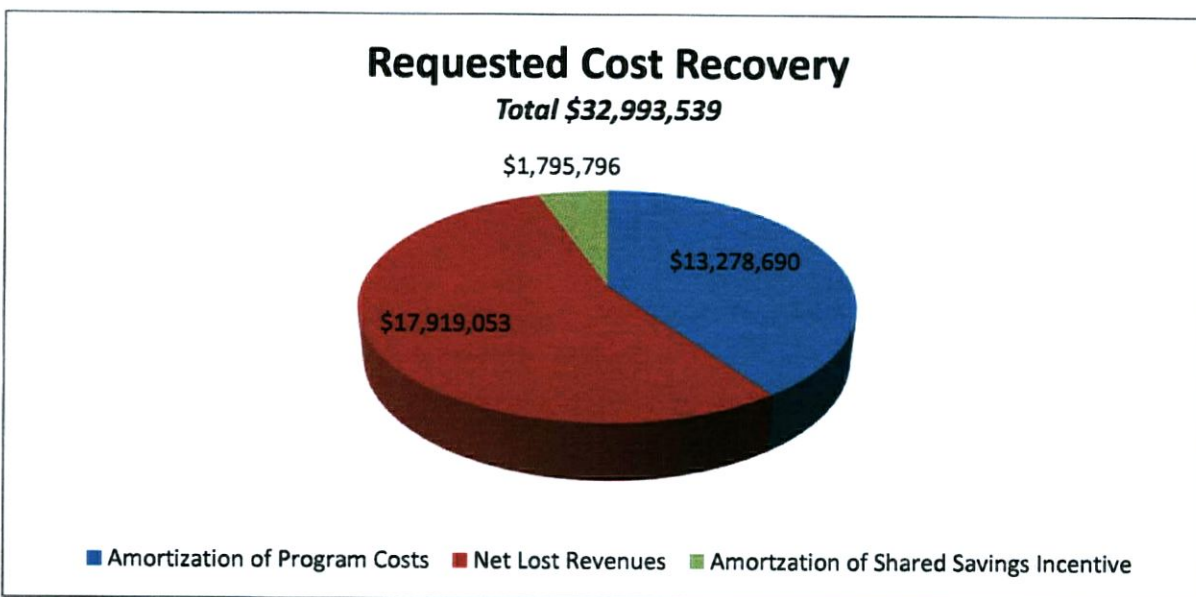
DSM COST EVALUATION

The total cost the Company is seeking to recover in this filing is \$32,993,539. For the programs currently in place, the Company estimates that average lifetime costs will be 2.23 cents/kWh saved.

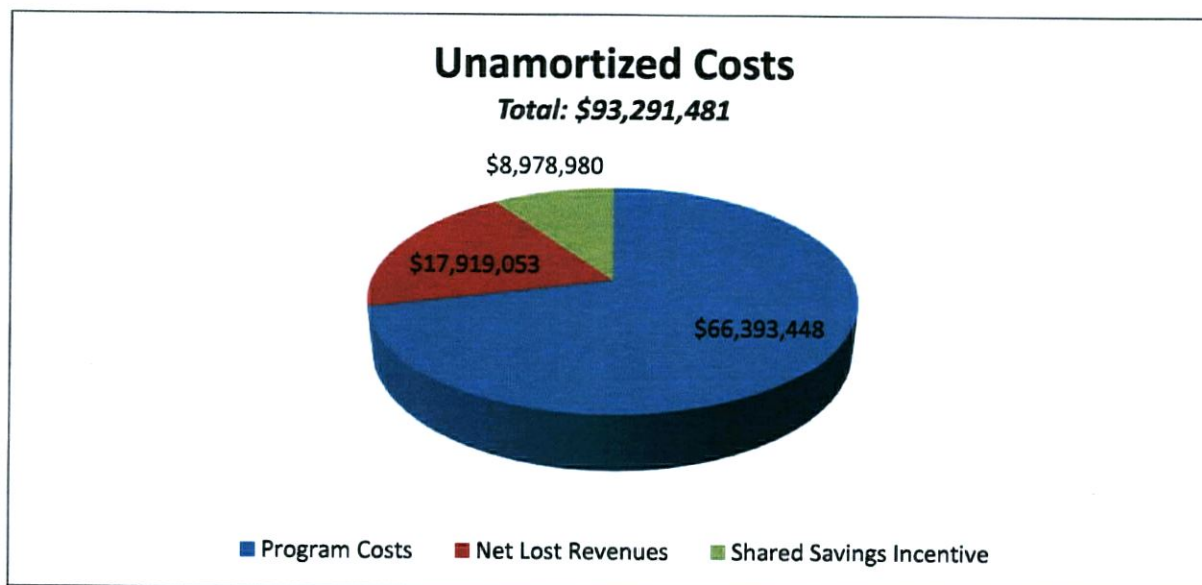
SCE&G's amortized Program Costs, with carrying costs, results in a request of \$13,278,690, or 40% of the total requested amount. The Company is requesting \$17,919,053 for NLR, or



54% of the total requested amount. SCE&G does not amortize its NLR. Total NLR are recouped during the Recovery Period. Finally, SCE&G is requesting \$1,795,796, 6% of the total requested amount, as SSI. SCE&G amortizes SSI over five (5) years without carrying costs.



The total unamortized cost for SCE&G's programs to date is \$93,291,481. This amount includes the Program Costs balance of \$66,393,448 (71% of the total unamortized cost); NLR of \$17,919,053 (19% of the total unamortized cost); and SSI balance of \$8,978,980 (10% of the total unamortized cost). The following chart illustrates the proportions of the unamortized costs attributable to the various components.



A breakdown of the major cost components of this Filing and the development of the billing factors are shown in Exhibit 1. The requested revenues from residential customers are recovered from all residential ratepayers, while the non-residential revenues are recovered from non-residential ratepayers that have not opted out of the programs.

ADVISORY GROUP

The SCE&G DSM Advisory Group (“Advisory Group”)² continues to meet on a regular basis to discuss the status of each program, including preliminary participation statistics, Evaluation, Measurement and Verification (“EM&V”) plans and preliminary EM&V data. The Advisory Group met on April 20, 2017, August 17, 2017, and November 9, 2017. During the meetings, SCE&G provided a preview of EM&V data, portfolio summaries and plans for future years, program updates and described program modification proposals. The Advisory Group offered insight regarding how the proposals could impact participation from various sectors and how the Company could utilize the Advisory Group more effectively in advance of a program launch.

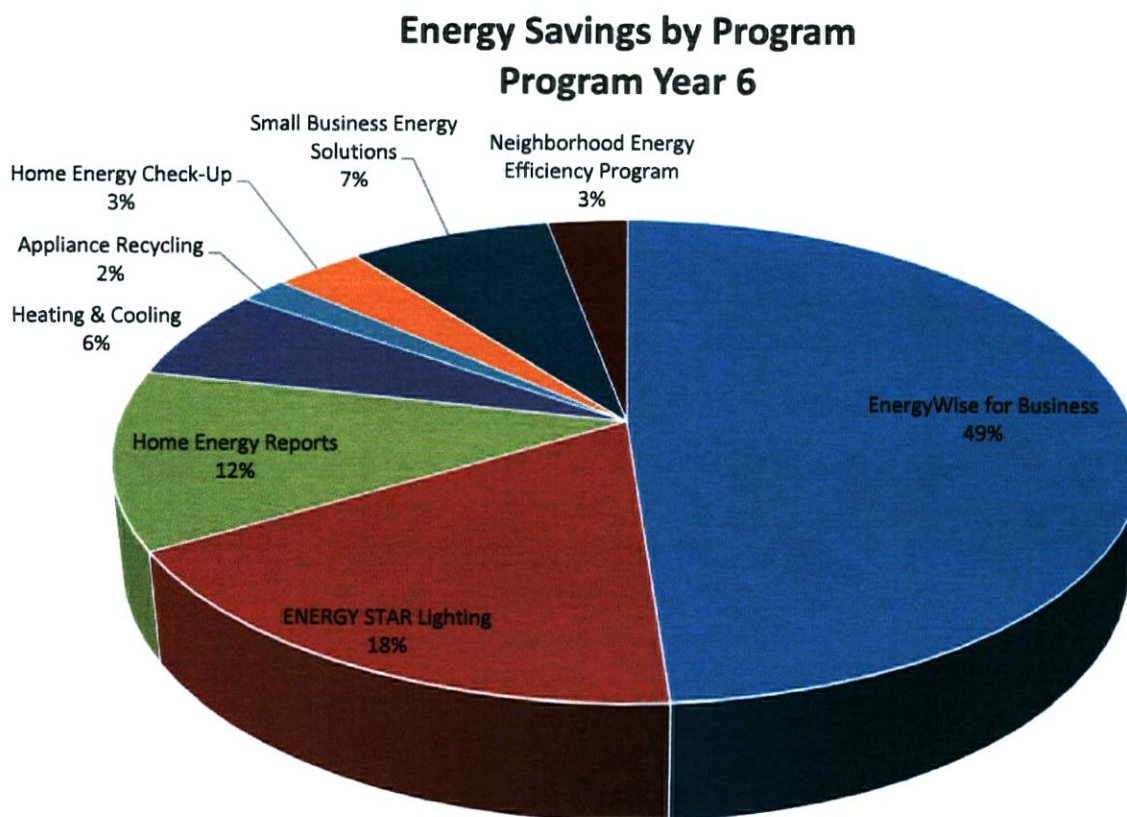
EVALUATION, MEASUREMENT & VERIFICATION

In May 2017, the Company filed its EM&V Report for Program Year 6. The EM&V Report is the basis for the latest true-ups of NLR and the SSI included in the Filing. To date, the Company has utilized EM&V results to true-up NLR and the SSI for Program Years 1, 2, 3, 4, 5 and 6. The EM&V Report for Program Year 7 should be available in May 2018, providing data for true-ups of Program Year 7 in the January 2019 filing.

According to the Program Year 6 EM&V Report, the Company spent 71% of projected Program Costs and achieved 73% of projected energy savings in Program Year 6. Four of the Company’s eight ongoing programs achieved energy savings in excess of forecast in Program Year 6. Three of the remaining programs achieved energy savings greater than 60% of forecasted energy savings, while one program (Home Energy Reports) realized 56% of forecasted energy savings. The residential ENERGY STAR Lighting and EnergyWise for Your Business programs provided 67% of the portfolio’s total energy savings. The following chart illustrates the relative energy savings by program.

² The Advisory Group was formed in accordance with Order No. 2010-472 and includes one representative each from the industrial sector, commercial sector, environmental sector, State Low Income Home Energy Assistance Program (LIHEAP) and ORS.





ESTIMATES USED IN THE FILING

For Program Years 7 and 8, all program avoided energy amounts, avoided capacity amounts, NLR, and SSI are projections that were developed using the ICF International ("ICF") DSM Planning Model. Thus, all the dollar amounts in the Filing, with the exception of the program costs in the Review Period and trued-up amounts in Program Year 6, are estimates. These values and dollar amounts are to be trued-up in future filings based on EM&V results. ORS has reviewed the data and assumptions used in the ICF DSM Planning Model and tested certain changes in the data and assumptions. ORS finds the ICF DSM Planning Model to have produced reasonable estimates for the SCE&G DSM programs.

FORECASTED RETAIL SALES

The Company utilized its most recent short-term sales forecast to compute the DSM Rate Rider in this Filing. This forecast is the same forecast SCE&G used during its 2018 Annual Fuel Filing. As such, ORS is familiar with the methodology used to generate the sales forecast and finds it to be a reasonable approach to establish rates.

ENERGY SAVINGS

The Company projects that during the Forecast Period the DSM programs will reduce annual electric usage by 69,492 MWh. These are noteworthy savings and may provide SCE&G the ability to avoid or defer outright power purchases or the construction of required new generating facilities.

OPT-OUTS

The Opt-Out Settlement Agreement allows all industrial customers to opt-out of the DSM programs (and not pay the DSM Rate Rider) by notifying the Company in writing that the customer does not wish to participate in the Company's programs and has or will implement alternative DSM programs at its own expense. Beginning with Program Year 4, large commercial customers also have the ability to opt-out of the DSM programs in accordance with the terms of the Settlement Agreement approved in Commission Order No. 2013-826. At the end of Program Year 7, 418 large commercial and industrial accounts had opted-out of SCE&G's DSM programs, representing 25% of the Company's retail electric load. This is a slight decrease over Program Year 6, in which 420 large industrial and commercial accounts had opted-out, representing 25% of the Company's retail electric load.

DSM RATE RIDER

The following table compares previous DSM Rate Riders to those currently requested by SCE&G:

DSM Rider Class	Approved 2016 Rate (¢/kWh)	Approved 2017 Rate (¢/kWh)	Requested 2018 Rate (¢/kWh)	Percent Change in 2018 over 2017 Rate
Residential	0.300	0.276	0.221	-20%
Small General Service	0.200	0.202	0.259	+28%
Medium General Service	0.157	0.197	0.182	-8%
Large General Service	0.131	0.149	0.095	-36%

The Company's requested rate change would decrease the bill of an average residential customer using 1,000 kWh per month by approximately \$0.55.



CONCLUSION AND RECOMMENDATIONS

ORS is encouraged by the increased participation in the Company's programs in Program Year 7 and the corresponding increased energy savings. In addition, the decrease in the residential, medium general service and large general service rate riders indicate that the Company is successfully managing the costs of the DSM programs.

ORS finds the updated DSM Rate Rider to be developed in accordance with the terms and conditions set forth in Commission Order Nos. 2010-472 and 2013-826.



SCP&G Revenue Request for Demand Side Management Programs For the Recovery Period of May 2018 - April 2019

	Residential	Small General Service	Medium General Service	Large General Service	Total
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Program Costs:

Actual Balance of Program Costs as of November 30, 2017	\$34,754,684	\$14,117,119	\$8,181,629	\$9,340,016	\$66,393,448
One Year Amortization for Rate Calculation	\$6,950,937	\$2,823,424	\$1,636,326	\$1,868,003	\$13,278,690

Net Lost Revenues for December 1, 2015 through November 30, 2018

Cumulative Energy Savings (kWh)	85,419,000	51,471,484	26,971,273	26,566,243	190,428,000
Net Lost Revenue Factors (\$/kWh)	\$0.11912	\$0.10806	\$0.07897	\$0.04935	
Estimated Net Lost Revenues	\$10,175,111	\$5,562,009	\$2,129,921	\$1,311,044	\$19,178,085
True-up for Program Year 6	(\$520,292)	\$184,930	(\$372,908)	(\$550,762)	(\$1,259,032)
Net Lost Revenues for Rate Calculation	\$9,654,819	\$5,746,939	\$1,757,013	\$760,282	\$17,919,053

Shared Savings Incentive:

Cumulative Shared Savings Amortization through PY 8	\$822,226	\$368,772	\$208,828	\$264,592	\$1,664,418
True-up for Program Year 6	(\$136,146)	\$94,299	\$82,130	\$91,095	\$131,378
Shared Savings Amortization for Rate Calculation	\$686,080	\$463,071	\$290,958	\$355,687	\$1,795,796

DSM Rate Rider

Amortization of Program Costs	\$6,950,937	\$2,823,424	\$1,636,326	\$1,868,003	\$13,278,690
Net Lost Revenues	\$9,654,819	\$5,746,939	\$1,757,013	\$760,282	\$17,919,053
Amortization of Shared Savings Incentive	\$686,080	\$463,071	\$290,958	\$355,687	\$1,795,796
Total Requested Recovery	\$17,291,836	\$9,033,434	\$3,684,297	\$2,983,972	\$32,993,539

Projected Sales (GWh)

	7,811.7	3,494.0	2,022.9	3,129.2	
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DSM Rate Rider (¢/kWh)

	1.221	0.259	0.182	0.095	
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